

Remarks

At the time of the November 26, 2003 Office Action, claims 1 - 4 and 6 - 25 were pending. Claims 12-25 are allowed. Claim 6 - 11 are objected to. Claims 1-4 are rejected.

New claims 26-29 are presented for examination.

Claims 2-3, 6, and 25 are cancelled.

New claim 26 corresponds to cancelled claim 6 rewritten in independent form. The Examiner has objected to claim 26 indicating that it would be allowable if rewritten in independent form. New dependent claims 27-29 depend from claim 12 which the Examiner has indicated is allowable. These claim merely present additional choices for the transition metal and the activator. The antecedent basis for the transition metal choices is found in the Specification on page 9, ll. 7-12 which states in relevant part:

The transition metal M is preferably a Group 3 to 10 transition or lanthanide metal. Preferred Group 3 to 10 metals comprise Sc, Ti, Cr, Mn, Fe, Co, Ni, and elements directly below these in the Periodic Table. Preferred lanthanide metals include La, Ce, Pr, Eu, Yb, and the like. More preferably, the transition metal complex comprises a Group 3 to 6 transition or lanthanide metal, and most preferably, a Group 4 transition metal.

Specification, page 9, ll. 7-12

and in the Specification on page 12, ll. 10-17:

In another embodiment of the invention, the transition metal complex further comprises an activator. Generally, the activator converts the complex to a cationically active species. The catalysts are especially valuable for polymerizing olefins, such as ethylene, propylene, and/or other α -olefins such as 1-butene

or 1-hexene. Suitable activators are well known in the art. Preferred activators include alumoxanes (e.g., methyl alumoxane (MAO), PMAO, ethyl alumoxane, diisobutyl alumoxane), alkylaluminum compounds (triethylaluminum, diethylaluminum chloride, trimethylaluminum), and the like.

Specification on page 12, ll. 10-17

Claims 1 and 12 are amended to remove CH_2 , CHR^9 , CHR^9R^4 as possible choices for A and to remove hydrogen, aryl, and aralkyl for R^1 and R^2 . Claim 12 is further amended to insert "Group 3 to 10" before "transition metal" and to include an activator as a component of the polymerization catalyst. The antecedent basis for these amendments is found in the Specification on page 9, ll. 7-12 and on page 12, ll. 10-17 as set forth above. Moreover, claims 12-22 are amended to replace the word "compound" with "complex." Finally, claim 16 is amended to correct an obvious error with the manner in which one of the B-O bonds was drawn. No new matter is added by these amendments.

a. Rejection under 35 U.S.C. §102

Claim 1 and 2 are rejected under 35 U.S.C. §102(b) as being anticipated by Pelter et al., Tetrahedron, Vol., No. 14, pp. 2988-3006 (1993).

Claim 2 has been cancelled making the rejection of this claim moot. Claim 1 is amended to exclude CH_2 , CHR^9 , CHR^9R^4 as possible choices for A. Pelter only discloses compound in which A is carbon at the position bonded to boron. Accordingly, amended claim 1 is no longer anticipated by Pelter.

Claims 1-4 are rejected under 35 U.S.C. §102(b) as being anticipated by Matteson et al., Journal of Organic Chemistry Vol., No. 114, No. 1, pp. 1-7 (1976).

b. Claim objections

Claims 6-11 are objected to as being dependent upon a rejected base claim.

Claim 6 is cancelled and rewritten as independent claim 26. Independent claim 26 incorporates the relevant limitations of claims 1 and 2. Accordingly, new claim 26 is condition for allowance.

Claim 1, as set forth above, has been amended to exclude CH_2 , CHR^9 , CHR^9R^4 as possible choices for A. Amended claim 1 is clearly now distinguished from the cited art and is allowable. Accordingly, claims 7-11 are now allowable since they depended from amended claim 1 which is allowable.

Conclusion

Applicant has made a genuine effort to respond to each of the Examiner's objections and rejections in advancing the prosecution of this case. Applicant believes that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. If any additional issues need to be resolved, the Examiner is invited to contact the undersigned at his earliest convenience.

The Examiner is authorized to charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978 -- a duplicate of this paper is enclosed for that purpose.

Respectfully submitted,

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